

## **ABSTRACT**

A simplified, weak GPS C/A code coherent acquisition method. When performing GPS signal acquisition, the strength of a signal received at a GPS receiver having an outside antenna is generally sufficiently strong such that only 1 ms of data needs to be used in acquisition to find the signal. However, for weak signals received at a GPS receiver, when the antenna is inside a building or vehicle, for example, a long record of data is needed for acquisition. The present invention reduces the calculation burden for GPS signal acquisition for a weak signal.